SOME NEW AUSTRALIAN LEAF-HOPPERS (HOMOPTERA, JASSOIDEA)

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ULOPIDAE

Uloprora gen. nov.

The head is narrowly produced, the apex tilted dorsally; the produced portion, which consists solely of the vertex, is laterally flattened and keeled both dorsally and ventrally. The ante-clypeus is sunk below the level of the lora and the fronto-clypeus, the latter is somewhat depressed posteriorly between the antennal pits. Coronal and epicranial sutures are distinct, but there is no trace of frontal sutures, and the ocelli which are on the crown of the head lie well in front of the eyes. The tegmina narrow apically and the veins raised in relief. Wings are absent. The hind tibiac are short with small feebly-developed spines.

Uloprora risdonensis sp. nov. (Genotype) (Figs. 1, 2)

Length, 5 mm. Head punctate, covered with sparse white hairs; ventral surface chestnut-brown posteriorly, black anteriorly but for the fronto-clypeus which is grey between the antennal pits. Vertex greyish-brown with a pair of longitudinal dark brown stripes on each side. Pronotum punctate, chestnut-brown. Tegmen hyaline, veins light and dark brown. Thorax and abdomen, ventral surface and legs, light and dark brown.

 $Type \ \$ 9, from Risdon, Tasmania (coll. V. V. Hickman), in the collection of the Australian Muscum, Sydncy.

Austrolopa victoriensis sp. nov.

(Fig. 3)

Length, 4 mm. Head, ventral surface pale brownish-yellow, but for the cyes and an area below each antenna, which are black. Crown pale yellowish-brown. Pronotum declivous, grey mottled with black. Scutellum grey, anterior angles black. Tegmen transparent, veins brown; claval area coriaceous. Thorax and abdomen, ventral surface pale yellowish-brown.

 $Type \ \$ 9, from Warburton, Victoria (coll. F. E. Wilson), in the collection of Mr. F. E. Wilson, Melbourne.

The shape of the heads of the two species described above is sufficient to distinguish them from the two species of the Ulopidae previously described from Australia. It would seem that the development of a produced head, such as occurs with *Uloprora risdonensis* and in species in the genera *Cephalelus* Perch.

and Paradorydium Kirk. (Ledridae), has in all three genera, which comprise very small narrow insects, followed the loss of wings and may therefore be correlated with this factor. The effect of head production is to displace the legs from the front part of the body to the centre, and thus possibly serves to adjust the balance for walking purposes of insects that have lost both powers of flight and jumping.

LEDRIDAE

Platyledra monstrosa sp. nov.

(Fig. 4)

Length, 6 mm. General colouration, dark brown. Head, ventral surface, ante-clypeus pear-shaped, not separated from the fronto-clypeus by a transverse suture; maxillary plates visible only as a narrow border to the lora, lora apically depressed; fronto-clypeus flattened, separated from the genae by a deep depression; ventral apex of head overhanging, spatulate. Crown, rugose, wide, with three raised prominences close to the posterior border, and with a central longitudinal ridge; ocelli on the crown closer to each other than to the eyes on each side or to the margin of the crown; eyes prominent. Pronotum rugose, raised into a hump, wide laterally; propleurae forming overhanging flaps. Scutellum swollen apically. Tegmen rounded apically, venation reticulate. Hind tibia, external surface flattened, bordered by a row of fine even spines.

 $Type \ \delta$, from King George's Sound, Western Australia, in the collection of the Macleay Museum, University of Sydney.

Ledraprora compressa sp. nov.

(Fig. 7)

Length, 7 mm. Head, ventrally pale brown, rugose; fronto-clypeus narrowly produced posteriorly, diamond-shaped in section, tilted dorsally. Pronotum brown, mottled with grey posteriorly. Scutchum pale brown. Tegmen whitishhyaline, veins brown barred with white. Thorax and abdomen, ventral surface pale brown.

 $Type \ \ 2$, from King George's Sound, Western Australia, in the collection of the Macleay Muscum.

Anacephaleus latus sp. nov.

(Fig. 5)

Length, 4 mm. Head, ventral surface pale yellowish-brown; crown pale yellowish-brown with a median longitudinal dark brown stripe. Pronotum declivous, wider posteriorly than anteriorly, raised portion dark brown, remainder pale brown. Scutellum dark brown. Tegmen hyaline, veins pale brown, claval area coriaceous. Thorax and abdomen, ventral surface pale brownish-yellow.

Type δ , from King George's Sound, in the collection of the Macleay Museum.

Cephalelus punctatus sp. nov.

(Fig. 6)

Length, 15 mm. Head pale brownish-yellow; ventral surface flat from the anterior apex as far as the antennal depressions, thence slightly coneave medially. Crown narrowly produced, ocelli closer to the sides of the head than to the eyes. Pronotum smooth medially, punctate anteriorly and posteriorly. Tegmen punctate, venation distinct, pale brownish-yellow with a wide dark brown band lying close to, but not against, the costal margin; the band extends on to the pronotum and the head. Thorax and abdomen, ventral surface brown.

 $Type \ \$ 9, from King George's Sound, Western Australia, in the collection of the Macleay Museum.

AUSTROAGALLOIDIDAE

Austroagalloides flavus sp. nov.

(Fig. 8)

Length, 7 mm. Head, ventral surface apricot yellow, but for the genae and lora which are pale yellow. Crown narrow, with a broken black stripe along the anterior border. Pronotum yellowish-grey flecked with black. Scutellum yellow with black markings. Tegmen transparent, veins pale pink with small raised white dots; suffused with brown against the hind border between the second cubital and the first anal vein. Thorax and abdomen, ventral surface, pale yellow.

 $\mathit{Type} \ \ 2$, from King George's Sound, Western Australia, in the collection of the Macleay Museum.

THYMBRIDAE

Mitelloides gen. nov.

The head ventrally is much wider than long, and is bounded posteriorly by an overhanging transverse ridge that borders the fronto-clypeus medially and extends to the eyes on each side. Anterior to this ridge the fronto-clypeus is concave for one-third of its length. The crown is vertical and at right-angles to the ventral surface, and the ocelli, which are on the crown, are closer to the centre line than the eyes on each side. The pronotum is steeply declivous anteromedially, and the tegmina are rounded apically and have very small appendices. The hind tibiae are triangular in section and have a row of six spines mounted on protuberant flattened bases along one edge.

Mitelloides moaensis sp. nov. (Genotype)

(Figs. 9, 10)

Length, 9 mm. Head, ventral surface pale yellowish-brown but for the internal margins of the lora and the posterior third of the fronto-clypeus, which are very dark brown. Crown yellowish-brown flecked with reddish-brown. Pronotum, anterior two-thirds brownish-yellow with dark brown markings; posterior third grey. Scutellum yellowish-brown. Tegmen, proximal costal and

claval area punctate, brown, the rest hyaline; veins brown. Thorax and abdomen, ventral surface pale brown. Legs marked with a pattern of brown and yellow. Male Genitalia as in fig. 10.

Type &, from Moa, Banks Island, Torres Strait (coll. W. McLennan), in the collection of the Australian Museum.

Rhotidoides sidnica sp. nov.

(Fig. 11)

Length, 8 mm. Head black evenly mottled with apricot brown, ventrally much wider than long. Transverse ridge at hind margin of fronto-clypcus distinct, extending to the eyes on each side, nearly parallel to the antennal ledges. Pronotum and scutellum concolorous with the head. Tegmen pale khaki with rounded pale yellowish-hyaline markings. Thorax, ventral surface and legs with dark and pale brown markings. Abdomen, ventral surface pale brown. Male Genitalia as in fig. 11.

Type 3, from North Harbour, Sydney (coll. T. G. Campbell), in the collection of the Australian Museum.

BYTHOSCOPIDAE

Trocnada alpina sp. nov.

Length, 7 mm. Head, ventral surface, maxillary plates and lora pale grey; fronto-clypeus pale yellow. Crown declivous, pale yellow ornamented with red and black spots. Pronotum yellowish-grey with black and pink spots. Scutellum yellow with black markings. Tegmen pinkish-hyaline; veins pale brown bordered with black spots. Thorax and abdomen, ventral surface pale greenish-yellow. Hind tibia pale yellow, but for the external surface which is dark brown, and the bases of the spines which are black. Male Genitalia with long narrow parameres and sub-genital plates which are concealed by the overlapping tergite of the eighth abdominal segment; pygophores not developed.

Type &, from Alpine Creek, Mount Kosciusko (coll. A. L. Tonnoir), in the collection of the C.S.I.R. Division of Entomology at Canberra.

EURYMELIDAE

Eurymelella gen. nov.

This genus is closely related to *Eurymeloides* Kirk and *Eurymelessa* Ev., but the genotype which is described below differs from species in these genera in the following characters: the hind tibiae have only a single spur in addition to several spines, and the sub-genital plates lack any development of a style.

Eurymelella tonnoiri sp. nov.

(Fig. 14)

Length, 5 mm. IIead black but for the lora, which are in part pale brown, and the crown, which has four white spots. Pronotum black, but for the hind

border which is in part white. Scutellum black. Tegmen black with irregular hyaline areas, veins brown; a narrow sinuate white fascia stretches diagonally from close to the junction of the radius and media to the second anal vein. Thorax and abdomen, ventral surface and legs marked with an irregular pattern of black and brown.

Type &, from Alpine Creek, Mount Kosciusko (coll. A. L. Tonnoir), in the collection of the C.S.I.R. Division of Entomology at Canberra.

Eurymeloides kalimensis sp. nov.

(Fig. 13)

Length, 7 mm. Head, pronotum and scutellum pale brown mottled with dark brown. Tegmen hyaline brown with two transverse white fasciae. Thorax and abdomen, ventral surface with light and dark brown markings. Hind tibia pale brown, each spur dark brown at the apex white at the base.

Type 3, from Kalima, in the collection of the Australian Museum.

Ipoides maculosa sp. nov.

(Figs. 15, 16)

Length, 7.5 mm. Head, width 3 mm. Head, pronotum and scutellum pale yellowish-brown mottled with black, or largely black; eyes, dark red. Tegmen marked with a variable pattern of black and whitish-hyaline; two transverse hyaline fasciae may be developed. Thorax and abdomen, ventral surface pale brown. Legs black, the edges white or pale brown.

Type &, from Frome Downs Station, South Australia (coll. D. C. Swan. 4/38 on Heterodendron sp.), in the collection of the Australian Museum.

Ipoides loranthae sp. nov.

(Figs. 17, 18)

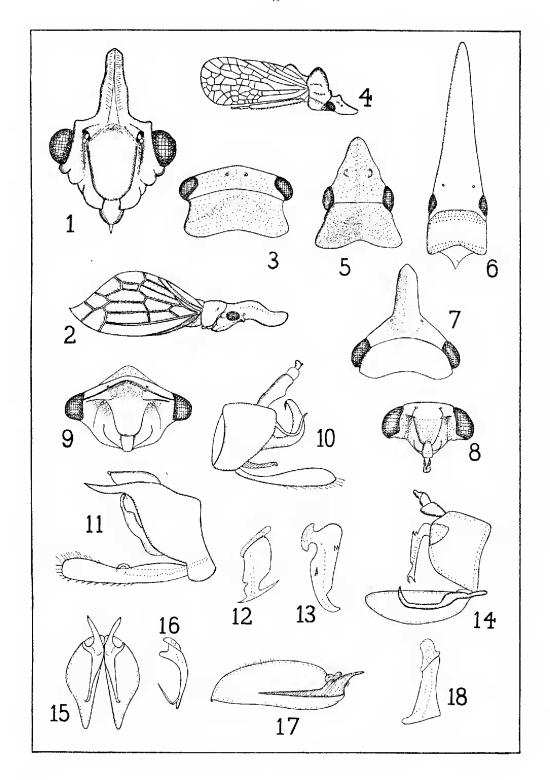
Length, 5 mm. Head, maxillary plates and lora whitish; ante-clypeus and fronto-clypeus medially black mottled with pale yellowish-brown; vertex marked with a pattern of black, light and dark brown. Crown of head and pronotum concolorous with the vertex. Scutellum, anterior angles black, the remainder black mottled with brown. Tegmen hyaline, veins black with white bars; claval area brown with two irregular white markings. Thorax and abdomen, ventral surface, pale brown.

Type, &, from Curnamona Station, South Australia (coll. D. C. Swan on Loranthus pendulus growing on Eremophila glabra), in the collection of the Australian Museum.

Ipoella norrisi sp. nov.

(Fig. 12)

Length, 6 mm. Head pale biscuit-colour with or without black or brown markings on the fronto-clypeus and vertex. Pronotum pale brown or black mottled with grey. Scutellum marked with an irregular black and brown pattern.



Tegmen pale hyaline-white partially suffused with light or dark brown, and with small anterior and posterior white fasciae that do not extend as far as the anal border. Thorax and abdomen, ventral surface pale brown.

Type &, from Fremantle, Western Australia (coll. K. Norris), in the collection of the Australian Museum.

DESCRIPTION OF FIGURES

Figs. 1-18

1, Uloprora risdonensis, head, ventral aspect; 2, Uloprora risdonensis; 3, Austrolopa victoriensis, head and pronotum, dorsal aspect; 4, Platyledra monstrosa; 5, Anacephaleus latus, head and pronotum, dorsal aspect; 6, Cephalelus punctatus, head and pronotum, dorsal aspect; 7, Ledraprora compressa, head and pronotum, dorsal aspect; 8, Austroagalloides flavus, head, ventral aspect; 9, Mitelloides moacnsis, head, ventral aspect; 10, Mitelloides moacnsis, male genitalia; 11, Rhotidoides sidnica, male genitalia; 12, Ipoella norrisi, aedeagus; 13, Eurymeloides kalimensis, aedeagus; 14, Eurymelella tonnoiri, male genitalia; 15, Ipoides maculosa, sub-genital plates and parameres; 16, Ipoides maculosa, aedeagus; 17, Ipoides loranthae, subgenital plate and paramere; 18, Ipoides loranthae, aedeagus.